

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF NEBRASKA

MARCIA K. HAJEK, individually and as personal representative of the estate of ALAN E. HAJEK, deceased)	CASE NO. 4:08-CV-03157
)	
Plaintiff,)	
)	
vs.)	
KUMHO TIRE CO., INC., a foreign corporation;)	AFFIDAVIT OF JOSEPH L. GRANT
KUMHO TIRE, U.S.A., INC., a California corporation; and)	IN SUPPORT OF KUMHO'S
FORD MOTOR COMPANY, a Delaware corporation,)	MOTION TO COMPEL DISCOVERY
)	
Defendants.)	
STATE OF NORTH CAROLINA)	
COUNTY OF MECKLENBURG) SS	

I, Joseph L. Grant, declare as follows:

1. My name is Joseph L. Grant. I am over the age of 21, I have the use of reason, I understand the nature of an oath, and I am capable of making this declaration. The facts stated in this declaration are true and correct based upon my personal knowledge. If called upon as a witness I could and would testify to the following as of my own personal knowledge.
2. I make this declaration in support of a motion to allow Kumho Tire Co., Inc. and Kumho Tire, U.S.A., Inc., to fully inspect the following: (1) the subject Kumho tire that the plaintiff in the above-captioned action claims to have failed at the time of the accident that is the subject of said action, (2) the wheel on which the subject tire was mounted at the time of the



accident, and (3) all companion and spare tires and wheels mounted on or kept with the subject 2001 Ford F250 Super Duty pickup truck at the time of the accident (hereinafter, categories (1) through (3) are collectively referred to as "the accident artifacts").

3. I am currently self-employed as an independent tire analyst, and have been since January 2006. My business address is 4201 Moss Creek Court, Matthews, North Carolina, 28105. My *Curriculum Vitae* is attached as Attachment A, and it accurately reflects my education, employment, and other matters set out therein.

4. Prior to my self-employment as a tire analyst, I was employed by Continental Tire, North America, Inc. ("CTNA"), and by its predecessor companies Continental General Tire, Inc., and The General Tire & Rubber Company, as the Director of Product Analysis, from January 1993 until January 2006. In this capacity, I was responsible as a company-wide consultant to assist other departments on the subject of tire failure analysis, tire performance standards, and safety literature. I maintain a laboratory and testing/inspection equipment in Charlotte, North Carolina.

5. I graduated from Fenn College of Engineering at Cleveland State University in 1971 with a Bachelors of Science in Chemical Engineering. I have also participated in post-degree continued learning and education and have belonged to various professional organizations related to engineering and tire design.

6. As part of my job responsibilities, both during my prior employment and now as an independent consultant, I perform forensic examinations of tires that are the subject of product liability lawsuits, in order to determine the reason(s) for the disablement (if any) of the subject tire. As part of my examination, I may also examine the wheel on which the subject tire was mounted, the valve stem, the valve core, the valve cap, remnants of the tire, and other tire

and wheel assemblies mounted on the subject vehicle, including the spare.

7. I am informed that the plaintiff in this lawsuit has alleged that the subject accident was caused, in whole or in part, by the failure of a certain Kumho Venture AT tire, bearing DOT #1FTNW21F01EB87943. In order to determine the manner in which the subject tire may have failed and the reasons for the failure, it will be necessary to perform a non-destructive forensic examination of the subject tire and its related parts, including the wheel and valve. In addition, it would be helpful to examine the companion tires and wheels involved in the accident as well. The non-destructive forensic examination of the companion tires and wheels may provide additional information about the service and failure of the subject tire.

8. I have been retained by the Kumho Tire defendants to conduct an expert tire forensic examination of the subject accident artifacts in this case. I have received and reviewed the Tire Inspection Agreement, attached hereto as Attachment B, which I understand to have been submitted to plaintiff's attorneys but not executed by them. I have agreed with Kumho's attorney to be the primary consultant described in said Agreement to receive shipment of the accident artifacts, and to maintain custody and care of the accident artifacts in accordance with said Agreement until the examination is complete, and then to ship the accident artifacts directly to the plaintiff's attorneys in accordance with the said Agreement. I have agreed to perform my examination, documentation, and testing in compliance with the said Agreement. I also agreed to comply with any orders of the Court with respect to any work I might do with the artifacts and with respect to handling of them while I have their custody. Subject to the Court's guidance, my inspection will be performed under conditions that will allow me to fulfill the extended-examination time protocol that I describe in this affidavit, which is consistent with but more detailed than the conditions set out in the Agreement.

9. I have been advised by Kumho's counsel that Kumho may retain one or more other consultants to examine, document, and/or test the accident artifacts while the artifacts are in my custody and care. I have agreed to retain possession and control over the artifacts during the time that any other consultants works with them to ensure compliance with the terms of the Tire Inspection Agreement, but not otherwise to supervise, control, or participate in the work by any other consultant. I have agreed to inspect the artifacts upon my receipt of them and again prior to their return to plaintiff's counsel to ensure that their condition remains the same while in my custody and to document any alterations in condition or appearance during that time. If any outside experts examine the subject tire for Kumho Tire, they will do so either at my laboratory or at a comparable facility, and I understand that they also will be bound to abide by the terms set forth in the Tire Inspection Agreement, and in this Affidavit, subject to the Court's requirements.

10. Kumho's counsel has informed me that counsel for the parties have failed to reach agreement on production of the accident artifacts for examination by defense consultants and that plaintiff's counsel insists that any examination or testing be done in the law offices of plaintiff's counsel in Kansas City, Missouri, and be done with plaintiff's counsel present. The following paragraphs pertain to those possible conditions for examination of the artifacts by me or by any other consultant.

11. The Kumho Tire defendants will be unduly prejudiced in their defense of this matter if they are denied the opportunity to properly examine the tire at issue and any companion tires in this product liability lawsuit. Specifically, the defendants would be denied the opportunity of proving forensically that there was no defect in the tire and that the tire failed, if at all, due to some factor outside of Kumho's control. Inspecting the subject tire in a scientifically proper way and using proper equipment is necessary so as to provide Kumho with

the same opportunity to conduct a detailed and confidential inspection and evaluation of the tire that is afforded to the plaintiff and her attorneys, who apparently have maintained custody of the tires.

12. The tire manufacture and assembly process is a highly complex sequence of physical and chemical events. The subject radial tire is a highly engineered structure, consisting of numerous components, each of which has separate functions that can be related to its failure.

13. A proper, non-destructive forensic examination of the tire and related parts requires special equipment and laboratory facilities. Typically, the examination includes several steps, although certain steps may be omitted, depending upon the condition of the tire. Various points on the tire and related parts will be marked in order to permit easy reference. If not already dismounted from its wheel, the tire will be carefully dismounted from the wheel using a tire-changing machine. This will allow a thorough visual and tactile examination of the tire and wheel separately. The tire will additionally be placed on a tire spreader to aid in the examination of the outside and inside of the tire. Special lighting and magnifying equipment will also be used. Various measurements may be made on the tire and related parts such as tread groove depths, tread hardness, rim diameter and rim width. Precision gauge and measurement instruments, such as Shore "A" Durometer may be used. The measurements will be conducted in a humidity and temperature-controlled laboratory in order to maintain the accuracy of the instruments. The air retention capability of the tire, wheel and valve may also be measured with special gauges. The tire and related parts will be photographed from various angles. Macro and close-up photographic equipment may be used. In addition, the tire may be x-rayed with the aid of special x-ray equipment designed specifically for tires.

14. An x-ray can become necessary to conduct a scientific investigation of the cause

of a tire failure. I cannot determine whether it is necessary or feasible with any particular tire until I have had the opportunity to conduct a full non-destructive examination under proper lighting and using proper measurement equipment, as described above. However, the necessary lighting, equipment, and the x-ray equipment are too large or numerous and collectively immobile to bring them to the tire. Thus, the only feasible way to conduct a thorough tire examination is to inspect it at a properly equipped facility that has quick availability to the equipment and x-ray equipment that I have had previous experience with. The equipment and the laboratory environment necessary for properly examining and photographing the tire are available in my laboratory in Charlotte, North Carolina .

15. I have visited a number of offices of law firms during my career and have observed that none of them appeared to have available the kind of equipment described above.

16. In addition to the facility and equipment requirements described above, a one-day examination is too limited to allow for a proper forensic examination, because an examination can be an extensive and time consuming process. The tire, tire remnants, wheel, etc., might have to be revisited over a period of time, particularly with photographs and possibly x-rays to make sure that all data and photographic evidence is as accurate as possible. In addition, there are facility requirements, as described above, such as availability of and access to appropriate lighting, essential tools and x-ray equipment (if deemed necessary), etc. that the expert is familiar with, which are essential for the expert to conduct a thorough non-destructive forensic examination. Assuming that a lawyer's office could be equipped with the necessary equipment and other physical requirements, the cost of doing so would be increased by the need to make that adaptation over the time period needed for proper examination.

17. In light of the above equipment and other requirements for proper examination, it

is customary for the subject tire, tire tread and/or remnants, and wheel to be shipped (usually via United Parcel Service or Federal Express) to a party's expert for private forensic examination at a proper facility. Details of the expert's examination and findings are not discoverable until expert disclosure is due.

18. I understand from defense counsel that transporting the tire and related parts to my laboratory in Charlotte, North Carolina and then back will be entirely at the expense of Kumho Tire. Identification tags will be attached to the tires and related parts at the location where they are to be picked up by Kumho's representative. Photographs can be taken before the tire and related parts leave plaintiffs' possession in order to document their physical condition. The tires and related parts will then be transported by either Federal Express or United Parcel Service and delivered directly to my laboratory in Charlotte, North Carolina. The tire and related parts will be kept in a locked facility within my laboratory from the time they are received until the time they are returned. I have never lost any tire in litigation using these procedures.

19. Any examination performed by me or anyone else while the accident artifacts are at my facility will be non-destructive. The examination and photography will not alter the physical condition of the tire or related parts. The tires and related parts will be returned to the plaintiffs in the same physical condition as they were received. Destructive examination and/or testing procedures will not be conducted without consent of other parties in a separate writing. In addition, the tire will not be materially altered during examination and/or testing. If this should occur, then spoliation remedies are available.

20. I will take reasonable steps to preserve the condition of the accident artifacts as received, to maintain the same in the condition they were received. I will video document the unpacking and re-packing of all evidence shipped; and the documentation will be made available

to counsel so that there will be a discoverable visual record of the evidence to verify that it has not been altered in any way. The plaintiff will also have ample opportunity to document the condition of the evidence prior to its shipment.

21. Any concern of plaintiff that something physically destructive may be done during this inspection to alter the tire is unfounded. In fact, the rushed time pressure of a field examination can be of more concern regarding the preservation of the condition of the tire and other accident artifacts. The proposed testing is non-destructive and, as described above, the tire's condition will be documented pre- and post-examination. Finally, I understand that plaintiff has a legal remedy available, namely, a claim for spoliation of evidence, in the event that anything unforeseen occurs during the shipment or examination of the subject tire.

22. I have been advised by Kumho's attorney that each of the Kumho Tire defendants agrees that it will be responsible for the condition of the accident artifacts from the time these items leave the possession of plaintiff's counsel until they are returned into the possession of plaintiff's counsel, and that any breach of any agreement, including any material alteration, destruction or loss of the accident artifacts that causes material prejudice to the plaintiffs, while said items are in the possession of any attorney or consultant for the Kumho Tire defendants, will subject these defendants to any and all sanctions and/or evidentiary rulings as applicable under Nebraska law.

23. I will make reasonable efforts to complete my examination and testing of the accident artifacts, as well as any examinations by other consultants at my facility, and return same to plaintiff's counsel, or as otherwise directed, within 60 days of receipt of the same. In returning the accident artifacts, I will employ the same procedures to prepare them for shipment and to ship them as described above the initial shipment to my facility.

24. The approximate cost for me to travel from Matthews, North Carolina, to Kansas City and back would be \$953.00 on Northwest Airlines.

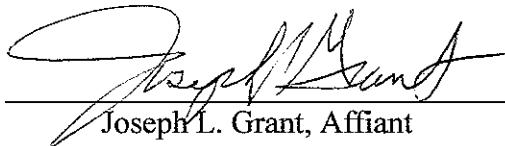
25. I estimate that my additional time required to examine the artifacts in Kansas City, as compared with the facility I would use in North Carolina, would be 24 hours or 3 business days, including travel, arranging for the availability of necessary equipment (if available), setting equipment up for use at the law office, and then taking it down and repacking it for return to North Carolina or other source. My hourly fee for work on this case is \$250.00 per hour. The foregoing estimate of additional time does not take into account time I might have to spend waiting in Kansas City for the schedule of plaintiff's counsel to accommodate counsel being present through my examination or lodging or return trips necessary because of the need to examine the artifacts over a period of days. I believe that additional costs and time for other consultants to travel to Kansas City would be similar, though it would vary depending on their points of origin. Nor does the foregoing estimate of additional costs take into account the considerable rental and/or transportation costs to adequately equip a lawyer's office in Kansas City for a proper forensic tire examination, assuming such would be reasonably feasible at all.

26. I am familiar with the charges for shipment of similar types and quantities of tires and related artifacts from vehicle accidents that have been shipped from other locations to my facility in North Carolina in other cases, and estimate that the cost for shipping the artifacts involved in this case from Kansas City to my facility and back would be approximately \$500.00.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on this 9th day of June, 2009.

Further, Affiant Sayeth Naught.



Joseph L. Grant, Affiant

NC P# 28315407
UC

SUBSCRIBED and SWORN to before me on this
9th day of June, 2009 to certify which witness
My hand and official seal.

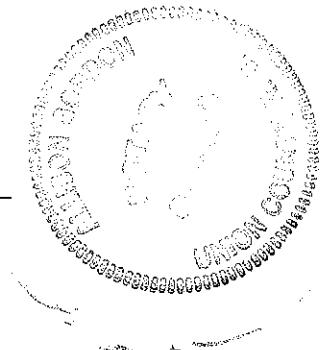


NOTARY PUBLIC, STATE OF NORTH CAROLINA

My Commission Expires:

3/25/2011

#455953.3



CURRICULUM VITAE OF
JOSEPH L. GRANT

PRESENT

EMPLOYMENT:

Independent Tire Analyst

HOME ADDRESS:

4201 Moss Creek Court
Matthews, North Carolina 28105
Phone 704 617 0336

EDUCATION:

Bachelor of Science in Mechanical Engineering – June, 1971
Fenn College of Engineering, Cleveland State University

**COURSES &
SEMINARS:**

- Tire Society Symposium
- Akron Rubber Group
- Clemson University Tire Industry Conference (October, 1985 and 1986)
- Monsanto Rubber Technology Seminar (May, 1989)
- SAE Motor Vehicle Accident Reconstruction and Cause Analysis (March, 1993)
- International Tire Exposition and Conference
- Northwestern University Traffic Institute Accident Investigation (March, 1997)
- STL Trans Tech Tire Technology Seminar – 1999

**PROFESSIONAL
ORGANIZATIONS:**

- Society of Automotive Engineers
- Akron Rubber Group
- Rubber Manufacturers' Association
 - Chairman - Truck Bus Tire Engineering Committee (1986-1992)
- Tire & Rim Association
- The Maintenance Council of the American Trucking Association
- American Society of Mechanical Engineers
- Tire Industry Association
- American Chemical Society

PUBLICATIONS:

"What makes a High Performance Tire Different than a Regular Tire"

Jan. 1986 - Akron Rubber Group

Oct. 1986 - Clemson University Tire Industry Conference

April 1987 - American Retreading Association

"Rim Line Grooves as an Indicator of Underinflated or Overloaded Tire Operation in Radial Tires"

September 2004 - ITEC

PATENTS:

Method of Forming Belted Radial Tires from a Cylindrical Tire Band (1977)

EMPLOYMENT:

• June 1971 – Dec. 1994 The General Tire & Rubber Company

CURRICULUM VITAE OF
JOSEPH L. GRANT

• Jan., 1995 – April 2000	Continental General Tire, Inc.
• May 2000 – Dec. 2005	Continental Tire, North America, Inc.
• Jan. 2006 – Present	Independent Tire Analyst

POSITIONS:

- June, 1971 Engineering Trainee, Tire Technology Department, Akron Tire Manufacturing Plant (Akron, Ohio).
- October, 1972 Project Engineer, Advanced Tire Development.
Responsible for the Development of Advanced Concept Tire Products, including Fiberglass Belted Radial Passenger Tires and Advanced Bias Truck Tires (Akron, Ohio).
- October, 1978 Manager, Bias Passenger Car Tire Engineering Technology.
Responsible for the Engineering Development Group for Bias Passenger Tires (Akron, Ohio)
- April, 1980 Manager, Replacement and Private Brand Passenger Car Tire Engineering Technology.
Responsible for the Engineering Development Group for Bias and Radial Passenger Tires (Akron, Ohio).
- March, 1987 Section Manager, Radial Truck Tire Engineering.
Responsible for the Engineering (Construction and Mold Design) Development Group for Radial Truck Tires (Akron, Ohio).
- September, 1988 Director, Commercial Tire Technology.
Responsible for the Engineering (Construction and Mold Design) and Compound Development Groups for Commercial Products, including Bias and Radial Medium and Heavy Service Truck Tires and Giant, Farm and Industrial Tires (Akron, Ohio, September 1988 - March 1992) (Mt. Vernon, Illinois, April 1992 - December 1992).
- January, 1993 Director, Product Analysis.
Responsible as company-wide consultant to assist other Departments on the subject of Tire Failure Analysis, Tire Performance Standards, and Safety Literature (Akron, Ohio, January 1993 - October, 1995) (Charlotte, North Carolina, November 1995 – January 2006).
- January, 2006 Independent Tire Analyst